THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 52. **BALTIMORE, MD. APRIL 23, 1839.** **Vol. V.**

☞ This publication is the *successor* of the late **AMERICAN FARMER** and is published at the office, at the *N. W. corner of Baltimore and North streets, over the Patriot office*, at TWO DOLLARS AND FIFTY CENTS *per annum*, if paid within one month from the time of subscribing, or $3 if after that time. All letters to be postpaid.

BALTIMORE: TUESDAY, APRIL 23, 1839.

We copied some weeks since a notice from one of our cotemporaries, of the subscription on the part of the Legislature of the State of Pennsylvania for *fifteen hundred copies* of our *Silk Manual*, for gratuitous distribution among the people of that time-honored commonwealth, and we subjoin the following with the more pleasure, as it emanates from a source no less impartial than competent to judge. Praise from such a source disarms one of those false notions of delicacy which might be indulged in on ordinary occasions, and is at once the bond and the license for republication.

ROBERTS' SILK MANUAL.

In the House of Representatives of this State, the Committee on Agriculture, recommended the purchase of fifteen hundred copies of Roberts' Silk Manual, for distribution among the people, which was agreed to. The Manual is the most complete of any with which we are acquainted. The author E. P. Roberts, of Baltimore, Editor of the Farmer and Gardener, is the untiring friend of agriculture. We are pleased to find his labors thus appreciated by our legislators, and the information which he has been at so much pains to collect, about to be so extensively diffused.—*Lancaster (Pa.) Journal.*

We will merely add that in consequence of the unusually rapid demand for our *third edition*, and the above order, we were compelled to put a *fourth* one to press, which will be speedily ready for delivery, and it may not be inopportune to remark, that it will contain much *additional matter*, which we trust will increase its favorable consideration with the public.

ROOT CROPS.

The scarcity and dearness of beef cattle seem to offer a fit occasion for us to urge upon our agricultural friends the propriety of putting in a few acres of roots in addition to their usual crops, for the purpose of feeding their cattle, as every plan which can be adopted of *saving* the grain crops should be an object with them, provided that in so doing they can effect a *saving* of time, labor and money. Now as we believe all this can be done by the plan we are about to urge, we trust it may be favorably considered, and carried out, so far at least as to make a fair experiment of its utility. From various experiments made, it has been reduced to a certainty that one thousand bushels of *mangel wurtzel* or sugar beet can be raised from an acre of well manured land, and this number of bushels will not be considered large when we state, that it will only require that these roots should weigh 3 lbs. each to give us this quantity, and that they have been raised to weigh 22 lbs. For milch cows they are peculiarly well adapted, and if given out to them in the quantity of half a bushel a day, in two meals, say night and morning, in addition to their usual quantity of hay or fodder, will, during the winter and spring months, add seventy-five per cent. to their product in milk and butter, besides greatly increasing the richness and flavor of both. A half a bushel a day from the 1st of December, till the 1st of May, a period of 151 days—will at the rate of a thousand bushels to the acre carry 13 cows well over the whole period of time named, and leave them at the date named in excellent condition. As to the mode of keeping beets, no other care is necessary than is usually given to the preservation of potatoes or turnips. In proof of this we have sugar beets now, this 19th day of April, that have been kept in a dry cellar, unprotected by covering of any kind, that are now as sound as the day they were taken out of the earth, having preserved unimpaired all those qualities which render them a delicious table beet. Having stated the capacity of an acre, and shown as we trust conclusively, that it is competent to be made produce enough to sustain 13 cows from the first of December until the first of May, we would ask, to what else could an acre of land be appropriated that would do as much? We know of no crop that would prove as profitable, and, therefore, urge the propriety of a trial upon every farmer and planter: They may be planted from the present period throughout all May, and with proper manuring and culture will produce what we have stated.

In fattening beef cattle, if given in the quantity of a bushel a day, divided into four meals with the usual quantity of hay or fodder, they will prove eminently efficient, and save a vast quantity of corn. Should their culture be adopted there is no farmer that could not raise four times as many cattle for the butchers as he now does, as one acre in such culture will give him the material for fattening seven head.

Corn—As early planted corn generally succeeds best, we would respectfully urge it upon our readers to get in their corn as soon as possible, as this work being over they will have the more time to devote to the other operations of their estates.

We take pleasure in copying this article, as it is evincive that the silk culture is taking proper hold of the enterprising and intelligent people of the west.

SILK CULTURE.

We understand some of the citizens of our town and vicinity, within the last two or three months, formed an Association under the style of the "*West Tennessee Silk Company at Somerville*," and design so soon as circumstances will permit, entering extensively into the manufacture of silk. They have ordered from Boston, New York and Philadelphia, a large supply of Morus Multicaulis or Chinese Mulberry, which is expected by the opening of spring.

In conversation with one of the members of the Association, we were informed that after setting out their orchard preparatory to the rearing of the worm and the manufacture of the silk, they would most probably by the fall, be prepared to receive and fill orders to a large amount for the cuttings of this invaluable tree.

This is as it should be; and we are truly pleased to see our citizens engaging in this laudable undertaking. We think from the present appearance, the demand for the Morus Multicaulis in the course of twelve months, or perhaps a shorter time, will be considerable; and the "West Tennessee Silk Company at Somerville," will have conferred a favor upon the public by opening a market at our doors where this demand can be measurably supplied.

We are convinced that the experiment has but to be tried in this country, to satisfy the most incredulous, that the culture of silk is to become an immense source of wealth to the people of the United States. Already are large investments being made in the Eastern and some of the Southern States, in the culture and manufacture of this article; and the enterprising adventurers—if in-

deed adventurers they may be called—are realizing handsome profits from their outlays. In some instances as high as one thousand dollars per acre have been made;—all conversant with the business admit, that five hundred dollars to the acre may be calculated on with certainty.

We most heartily wish success to the company, and we are pleased that the business of introducing into our country and rearing this species of the mulberry, has fallen into the hands of persons having both the ability and the inclination to give it a fair trial.

MEMORIAL

Of a committee of the citizens of Somerset county, asking a bounty on the domestic production of Silk.

To the General Assembly of Maryland.

At a meeeting of citizens of Somerset county, assembled to consider the subject of the culture and manufacture of Silk, in Maryland, a committee, of which the undersigned is chairman, was appointed, to memorialize the Legislature of Maryland, on the subject of affording legislative encouragement to the production of silk in this State.

In proceeding to the discharge of the duty assigned them, the committee feel, in a great measure, relieved from the necessity of adverting, in detail, to the experiments which have already been made, and to the reasons upon which is founded the conclusions, that silk may become one of the most profitable employments of land, labor and capital, because they feel assured that the publications already made upon this interesting subject and the discussions and interchange of views, which have recently taken place in the National Silk Convention in Baltimore, and in the State Convention upon the same subject, in Annapolis, have already familiarised the General Assembly with what is known, and with what is anticipated, in reference to this important branch of industry, proposed to be introduced among us.

The committee believe that enough is known to warrant them in asserting that the soil and climate of Maryland are admirably adapted to the growth of the Mulberry, particularly of the species known by the name of Morus Multicaulis, (which has been found to afford the most abundant supply of nutritious food for the silk-worm,) and also that the climate is well suited to the rearing of the silk-worm itself. In these natural advantages of soil and climate, we have the principal agents in the production of silk. But besides these, capital is required to provide a supply of Mulberry trees, as well as to provide a Cocoonery and the requisite labor for the feeding of worms, and the proper machinery for the reeling and manufacture of silk. To these may be added, a knowledge of the natural history of the silk-worm, its proper treatment from the egg to the Cocoon, and skill in the reeling and manufacture of silk, as embracing all that is required towards its profitable production.

The preliminary inquiry then is, can silk, with the aid of these agents of production, be produced in Maryland, by domestic industry, as cheap as by the operations of commerce? For if we can grow or manufacture, and export any product, and in exchange for it, import into Maryland, and sell it cheaper, then, with proper legislative encouragement, there is good reason to believe we can, after a few years, produce it profitably here, (without the aid of a bounty) it is evident, that we would be encouraging a branch of production that cannot support itself, and prosecuting a losing business, by raising a production that would cost more than it would be worth. The bounty would in such case be a dead loss to the State, and a tax upon other branches of productive industry. But supposing the article of sewing-silk can be imported from abroad, and sold here for *ten* dollars per pound, and that its production here, by the employment of our land, labor and capital, including reasonable profits upon productive industry, would cost twelve dollars per pound, it is evident that the home producer must lose two dollars upon every pound of this production, and that the business could not be prosecuted without a bounty of two dollars per pound from the State. Suppose further that inexperience in the business, (as the want of skill and practice in reeling and throwing it into sewing silk, &c.) makes the cost four dollars per pound, more than it otherwise would be, and that the experience and practice of a few years, will enable the producer to afford a better article than the imported one, at eight dollars per pound, and that the business will then be a very profitable branch of productive industry; it is clear, that the State, by granting a *temporary* bounty of *two* dollars per pound, would not only cause to be introduced a very lucrative branch of industry, with all its collateral benefits, but would present to the people a better article, at a cost reduced *perpetuum*, by an amount equal to the bounty granted for a few years.

The above hypothesis is presented to illustrate the doctrine of the most enlightened moderm writers on political economy, that 'it may be wise in a government to grant a premium on a particular product, which, though it make a loss in the outset, holds out a fair prospect of profit in a few years time.' It may be politic thus to do, because, continues Mr. Say, (from whose excellent work the above extract is taken) "a new channel of industry may ruin an unsupported speculator, though capable of yielding enormous profit, when the laborer shall have acquired practice, and the novelty has once been overcome.' The committee present these views to satisfy if possible, the most sceptical, for it is presumed that no one who pretends to any knowledge upon the subject, doubts as to the silk business being ultimately profitable, even if it should be attended 'with loss in the outset.' But no anticipation of loss even in the outset, is indulged by those who are at all acquainted with the success, which has already attended the growth of silk, wherever its production has been attempted among us. In consequence of the peculiar nature of the production, it will abstract comparatively little from the land, labor, or capital, now profitably employed in other pursuits. At the present prices of raw silk, the profits upon the productive industry employed, far exceed those of any other agricultural pursuit. The demand will most likely be increased for many years, in a ratio to exceed the increased supply which competition will throw into the market. The great demand for American silk fabrics, on account of their superior texture and durability, over the flimsy imported fabrics, has already caused the erection of more factories in the Eastern States, than can obtain a supply of raw silk sufficient to keep them in operation. Great Britain has to import all the raw silk used in her very numerous and extensive manufactories, and her demand will contribute to prevent any diminution of the present prices of that article.

The inquiry will naturally arise, "if these facts are so, why may not the citizens of Maryland be left to the promptings of self-interest, in view of these extraordinary profits, to influence them to engage in the production of silk?" This inquiry deserves a satisfactory reply, for it is unquestionably a general rule in political economy, "that every one is the best judge how to employ his industry and capital." But to this general rule, the committee have already shown that there may be exceptions; and in reference to the very article of silk, history shows, that in every country where its production or manufacture has become a subject of national importance and wealth, it has been introduced and fostered under the encouragement of the government. The Queen of China, in the earliest history of the culture of silk, is represented as affording in her own person, an example of industry in its production: "and France," (says the writer before quoted,) "at present contains the most beautiful manufactures of silk and woollen in the world, and is probably indebted for them to the wise encouragement of Colbert's administration. He advanced to the manufacturers two thousand francs for every loom at work." The reason why this encouragement is required, is found in the fact, that "every unusual application of the power of capital, is, at first, contemplated with distrust or disdain, so that partiality shown to a profitable mode of employing industry or capital may be productive of national advantage."

The mass of mankind are content to follow on in the "beaten track," trodden by their forefathers. It is well known how slowly and gradually, are introduced into general use, even great and important improvements in the mode of prosecuting any particular branch of industry, in which the people generally are already engaged. How much more slowly and reluctantly then will the people engage in an entire new and unusual branch of industry, with the *modus operandi* of which, they have no acquaintance, either by experience or observation; and the very simplicity of whose operations, as represented to them by others, begets incredibility in reference to its anticipated profit? But when the enterprize has once received the sanction of legislative wisdom, confidence in it will spring up in the minds of our citizens; they will engage in it, with alacrity, and all its golden promises will be amply redeemed.

There is another view of this subject, to which the committee would invite the particular and deliberate consideration of the General Assembly, as presenting the necessity of an immediate offer of a bounty on the production of silk, (if the General Assembly deem it important that this branch of industry shall be introduced among us,) in so striking a light, that the committee think it cannot be resisted. This view is presented in the fact that the citizens of Maryland are not left to engage in this enterprize with advantages like those enjoyed by the citizens of several of our sister States, and of course if they were to engage in it, their products could not come into equal competition, with the products of those States. In the

States where a liberal bounty on the domesitc propuction of silk has already been offered, the profits on the productive industry employed, will be enhanced to the full extent of the bounty, beyond the profits in Maryland. The inevitable consequences which must result, and which must be deeply deplored by every citizen of Maryland, if this state of things is permitted to exist, will readily suggest themselves to the enlightened understanding of the General Assembly. If the General Assembly permit the present auspicious crisis to pass unimproved and our citizens shall not be enabled to enter the enterprize simultaneously with, or in quick succession after, the citizens of other States, the skill and experience, which they will acquire in advance of us, and the industry, which will be allured from our borders to find more profitable employment elsewhere, will leave Maryland far in the rear of the enlightened policy of the age, and cause the cheeks of her sons to tingle with the blush of shame.

The committee regret to learn that in the opinion of some, the condition of the State's finances precludes the expediency of granting the bounty contemplated by this memorial. The bounty is asked for only a few years, will be inconsiderable in its aggregate amount,and always subject to a repeal by the legislatue, if it should, contrary to all expectation, be found burthensome to the Treasury. The committee confidently believe that for every dollar paid as bounty on the product of silk, two dollars will be added to the aggregate wealth of the State, in the value of the article produced in consequence of the bounty.

The want of unanimity in the Councils of Maryland, in urging rapidly forward her system of internal improvements, a wavering, hesitating course, a morbid imagination, magnifying apparent difficulties into real obstacles, have contributed to cripple her energies and retard her progress in that march of improvement, in which some of her sister States have pressed onward, with a boldness and intrepidity, which command our admiration. Behold the genius of New York proudly seated on an eminence of prosperity, her magnificent internal improvements, the stupendous monuments of the wisdom and foresight of her statesmen, continually pouring golden treasures into her lap! Always among the foremost in the march of improvement, she has already offered a liberal bounty on the production of silk, that the stream of wealth, which flows from this branch of productive industry, may also contribute to her greatness. Similar means to those by which New York has attained her proud eminence, are within the reach of Maryland.

The committee, in conclusion, would respectfully snbmit the view herein presented, to the deliberate consideration of the General Assembly, in the hope that they will deem the granting of the bounty contemplated in this memorial, to be imperiously required by the most enlightened principles of political economy, and consequently, by the best interests of the State.

On behalf of the committee,

ISAAC D. JONES, Chairman.

A GOOD CROP OF MILLET.

Mr. Tucker—A few days since, Mr. A. Tinckelpaugh of Wayne county, called at the seed store with a quantity of very fine millet, and on making some inquiries of him respecting this crop, he gave me the following account, which, as the result of an experiment, is worth recording, and may be interesting to some of your readers.

Mr. T. said he had seen in the agricultural papers some flattering accounts of the millet crop, and therefore determined to give it a trial. He selected for this purpose 2 acres of new land, such as is termed good corn ground, being a rich sandy loam. It was only ploughed once, and well harrowed. The seed was sown the 3d day of June, at the rate of 7 or 8 quarts to the acre, and harrowed in. The crop grew finely, and was cut on the 15th day of August. It was threshed by a machine and yielded 160 bushels of clean grain, or 80 bushels to the acre. The straw made excellent fodder for cattle, and was worth more than two acres of good grass hay. Mr. T. fed out most of the grain to hogs, and considers it worth as much for feeding as the same weight of corn or peas. It weighs about 50 lbs. to the bushel. When ground into meal and mixed with cooked vegetables, &c. it is a very superior food for fattening hogs. And on the whole, Mr. T. considers it a most valuable and certain crop.

Yours, M. Bateman.

Rochester Seed Store, Feb. 20, 1839.

Gen. Farmer.

THE MORUS MULTICAULIS.

To the editors of the National Intelligencer.

Baltimore, April 11, 1839.

Gentlemen: A letter appeared in the National Intelligencer of the 9th instant, headed "Letter to N. B. Stoddart, Esq.," on the subject of the culture of silk in this country, which contains several statements deemed by me erroneous, and which I must ask permission to correct. The writer, "L. T.," objects to the morus multicaulis—first, because it was "imported from a climate so different from ours, which cannot stand the winter;" secondly, and "which, by the rapidity of its growth, shows the shortness of its life." To the first objection I have only to remark that the white mulberry itself is a native of China, and was imported into Italy and France from that country; so that the first objection to the multicaulis fails; for, if the multicaulis was imported from a country so different from ours, so was the white mulberry. But, reasoning from analogy aside, I know, from eleven years' possession of the morus multicaulis, that it is equally as hardy and just as capable of standing the winter as any other mulberry whatever, when planted upon its natural situation and soil. I have had it eleven winters, and have not yet lost a single bud from the effects of winter. A single tree was given to Dr. Hosack by Dr. Pascalis, in the spring of 1830; the latter gentleman planted it on his estate at Hyde Park, on the North river, on a high bluff 200 feet above the level of the river, and exposed to the northern blasts. That tree remains there still, never having lost a limb or a bud by winter. And, let me here remark, that the white mulberry itself is not found north of that locality, except in gardens, and not often there. I could mention hundreds of instances where the morus multicaulis has stood the winter unharmed, besides these cases, but it is deemed unnecessary.

The second objection, "the rapidity of its growth shows the shortness of its life," is the greatest recommendation that can be given of the mulberry tree. It grows so rapidly that we can plant it this spring, and get a crop of silk from it this *summer*! Is this an objection to an American? Is not the speedy return of the proceeds of an investment the greatest recommendation that the investment of capital can have? And suppose the trees were all to die in ten years, (my old tree is now *eleven* years old, and no signs of dying yet,) the returns they will have made by the "rapidity of their growth" will have more than paid for replanting them. So that this second objection is disproved.

"L. T." next says that "the drought of some parts of Europe injures them exceedingly." The fact is directly the reverse in this country. During that most unparalleled drought of last summer, the morus multicaulis preserved its luxuriance more perfectly than any other tree, native or foreign. Indeed, the old trees were entirely unaffected by it, and none but the very young ones suffered at all, and even those not as much as the majority of our native trees. With us its very large leaves are not more easily spoiled than those of the common white mulberry. "L. T." also asserts that the morus multicalis leaves "contain a less quantity of nourishing substances; the worms fed with them are often subject to many distempers," &c. The whole of this sentence is directly opposed to the truth. From the most careful experiments, it has been found that 80 pounds of morus multicaulis leaves contain as much nutritive matter as 100 pounds of the best of other varieties; that 80 pounds of the morus multicaulis will produce as much silk as 100 pounds of the best of any other kind; and that the worms are just as healthy on one kind as the other, disease being caused exclusively by mismanagement in some form or other. Let me quote another sentence from this writer; and that it may not escape the attention of the reader, let me make it the more conspicuous by placing it by itself *paragraphically*.

"Good God! have they not eagerly adopted all the improvements lately introduced in the culture of silk by Verri and Dandolo? Have they not lately preferred to the common white mulberry with which their ancestors used to feed the silkworms, the *Alpine morus*, which grows even in the most northern climates, and the *morus moretti* or *macrophylla*, which can be equally propagated both from seeds and from cuttings?"

If the reader has done reading this exquisite paragraph, I will just remark, that the people of France and Italy have not adopted all the improvements of Verri and Dandolo, and that these improvements are only adopted in a very few large establishments in either country, the mass of silk-culturists continuing in the old routine of their forefathers, in spite of Dandolo and all others. They have not preferred the *Alpine morus*, for they *never saw it*; it is an American production, raised, it is true, from the seed of the variety of white mulberry called the *moretti;* but it is American, both in growth and name, and never was seen or heard of in Europe. If particulars are desired, here they are. The Alpine mulberry was raised from seed of the Moretti mulberry, by Mr. Whitmarsh, of Northampton, Massachusetts. Out of many thousand trees thus raised from the par-

cel of seed, and numerous varieties, he selected a few of the best, and named them THE ALPINE; and this only two years ago. This name never was known in Europe until it was seen in American newspapers. Let me stop here to ask what can be thought of a writer who makes such blunders.

"L. T." also confounds the morus *moretti* and *macrophylla*, or considers these names as synonymous, which is another instance of his knowledge of the subject on which he writes. He also says the moretti equally propagates from seeds and cuttings. Now, I do know that the moretti is very difficult to raise from cuttings, and that it cannot be raised from seed at all! The moretti being itself bnt a *variety* of the white, the produce from seed are almost as various as their numbers. I saw some thousand raised from seed last summer, and the varieties were too numerous to count; the most of them were evidently the common white mulberry, and a few like what are called the Alpine.

I must conclude this by assuring "L. T." and A to Z, that the morus multicaulis will never be superseded in this country by either "*Alpine morus*," morus moretti, macrophylla, Dandolo, alala, Calabrian, or any other. It has been fully tried, and found superior to all other kinds in all the valuable requisites for the silk culture in this country. Respectfully, yours,

GIDEON B. SMITH.

From the Magazine of Horticulture.

Notes on a novel method of preventing Mildew in the open air culture of foreign Grapes—By A. J. Downing, Botanic Garden and Nurseries, Newburg, N. Y.

There are many situations, especially in the neighborhood of cities, from Philadelphia, as far north as the forty-second degree of latitude, where the more hardy and prolific varieties of the foreign grape may be cultivated with considerable success in the open air. Indeed, the only obstacle to general success in their culture out of doors, in the Middle States, is their extreme liability to attack by mildew of the young fruit, when the latter are just swelling, or have nearly attained the size of large peas. The mildew that then fixes upon them appears to indurate the skin of the young grapes, prevent their swelling to their proper size, and, in short, it generally unfits them for eating or any other purpose.

Various methods have been suggested, by different persons, for the prevention of this mildew or blight, which have been tried with more or less success. Some have recommended us to train the vines high, so as to be out of the reach of the damp ungenial vapors of the moist earth; others, to keep them low and well furnished with a fresh supply of young wood. Another remedy, which appears to have found much favor, consists in sprinkling the bunches while the grapes are very young, with a solution of flour of sulphur, which, it is asserted, will, in most cases, prevent the attack of the foul parasite.

We have no remarks, at present, to offer your readers upon the relative benefits to be derived from any of these modes. We simply wish to place before them another, and, as it appears to us, a very successful mode of treating the foreign grape in the open air, so as to have an abundance of fine fruit perfectly free from mildew every year.

A person about four miles distant, who rears a considerable quantity of Sweet Water, Chasselas, and other foreign grapes, for market, and who was formerly much troubled with the attacks of the mildew, was, some two or three years since, while reflecting on the subject, struck with the fact, that, with him, young vines, when they first came into bearing, generally produced good and unblemished crops for the *first* one or two seasons. After this, becoming comparatively feeble, the mildew began to appear, and gradually grew worse every following season.

Reflecting upon this suggestion, thrown out by nature in the above instance, it occurred to him, that if he could always keep his vine young and thrifty, or by some means provide himself with a succession of such vines, he might place the mildew, in a great measure, at defiance.

This he has been able to effect in the following way, the results being highly satisfactory. In the month of June, every year, he selects, on every vine, a clean shoot, (left the previous summer for that purpose,) some five to eight feet in length, which he buries in the ea th, about 18 inches of its middle part, in the common method of *layering*. The plants in his little vineyard are planted in rows, and the layers being made in the line of the rows, between the old plants, when they are rooted, which they are the next year, they are tied up to a stake to receive a partial training—The next, or second season, all the old plants are dug up and thrown away, if they are not perfectly strong and vigorous. In this way he preserves a constant stock of strong new vines, which are able, by their superior vigor, to resist the attacks of the mildew, and which, as we can testify, bear beautiful and abundant crops of fruit, free from mildew.

Those of your readers, who grow foreign grapes, are recommended to put in practice this method of culture, which is really attended with a trifling degree of trouble. The success which attends this method of constantly renewing the vines would appear to lead to the conclusion, that in a cold and comparatively ungenial climate like ours, the foreign grape, however well covered in winter, soon becomes too much enfeebled to produce fair and unblemished fruit. In the southern parts of the other continent, its duration, and, to a considerable degree, its fruitfulness, extends to upwards of half a century. A. J. D.

Botanic Garden and Nurseries, Feb. 1839.

From the same.

On the cultivation of Brussels Sprouts—by J. W. Russell.

The Brussels Sprouts are highly prized throughout Europe, as a delicate culinary vegetable—therefore it is grown as extensively as any of the brassica or cabbage tribe. The appearance of the plants is more like the Savoy cabbage than any other variety, with this difference,—the stems grow to the height of three or four feet, and are closely set, from the bottom to the top, with sprouts like small cabbages in miniature; each being from an inch to two inches in diameter.

The plants are raised from seed sown in April or May, an ounce of which, if good, will be sufficient to sow a bed four feet wide by ten in length. If the seed is sown in April, (which would be the best method,) on a slight *hot-bed*, under glass, the plants will be ready for the final transplanting by the second or third week in May. Select a piece of ground for this purpose, that is in good heart, and where the soil is deep. The plants need not be set out more than eighteen inches apart *each way*, as the head does not spread like a Savoy, and the leaves drop off before the sprouts are ready for gathering, which will be by the first of October. The tops or heads ought to be cut off *two or three weeks* before the sprouts are gathered for use.

The whole treatment, as to the cultivation and management, is precisely the same as the Savoy cabbage. In November, or before the ground freezes hard, the plants might be taken up, and planted in earth in a cellar, pretty close together, and would be fouud to be an excellent vegetable through the winter. J. W. RUSSELL.

Mount Auburn, Cambridge, March 8, 1839.

CLARIFYING BEET SUGAR.

In answer to an inquiry respecting the most approved method of clarifying sugar from the beet, we have to observe, that the latest improvement in the manufacture of this article, is to slice and dry the root, after which it is ground, or reduced to a coarse powder—water being filtered through it, the saccharine matter is readily dissolved, leaving behind the coloring matter and vegetable extract, combined with the fibrous part of the root. The extract, or solution of saccharine, which is thus obtained, is nearly as the sap from the maple, and when reduced to a syrup may be clarified with as little difficulty, and in the same manner as maple syrup.

[From the Southern Agriculturist.]

CULTIVATION OF THE SWEET POTATO.

St. John's, Berkley, March, 1839.

Mr. Editor—The following letter, written by Mr. Solomon Clark, of St. Stephen's, in reply to one written him by a friend, appears to me so full of valuable information, that I request the favor of its publication in your journal. Mr. C. is well known as a most successful and thriving agriculturist, and is authority on the subject of potatoes, for they are usually a drug with him. He does not state the character of his soil—I happen to know that it is a good specimen of pine land—a character of soil held at present in little repute, but which I would not be surprised to see soon very highly appreciated. Mr. C. further inculcates the planting of potatoes in March. I have so often heard successful planters dogmatize on the relative advantages of early and late planting, that I have arrived to the conclusion that, with reasonable limits, both parties are right.

Trusting that the hints contained in this paper may yet be valnable, even for the present year, I submit it you—and am, sir, yours, &c.

A SUBSCRIBER.

Rock Hall, St Stephen's, Feb. 1839.

Dear Sir— * * * * * * * As to my method of raising potatoes, I would prefer telling you in conversation to communicating by letter, as there are many little points which may escape me in writing, to which you would naturally call my attention in conversation.

In the first place, plant your potatoes by the middle of March, in last year's cotton field, if practicable; put under the list from twenty to twenty-five bushels of cotton seed to the acre. Make your bed small, and enlarge it while planting and hoeing. Your potatoes should not be planted more than from three to four inches apart. The long potatoes should be cut, the smaller should be planted whole.

After the potatoes are set, cover them by drawing up the earth on *one* side of the bed; clap the earth well with the hoe, then draw up the earth on the other side, and leave it loose, giving to the bed a sharp top.

When you see the potatoes coming up, send a careful hand to remove all the earth from the top of the bed, as far down as the part which was clapped. If a few plants are cut in this operation, no harm will be done. If this work be well done, you will be spared the trouble of picking them.

Before your field becomes grassy, one hand can draw down with the hoe a task and a half, (three-quarters of an acre.)* Let the hoe go as close to the plant as possible. Let the field remain thus drawn down from seven to ten days, and then with a shovel-plough run one (or if the beds be far apart, more than one) deep furrow. Follow the plough with the hoe while the earth is yet loose, and draw up a large bed. During this work pay no attention to the vines, as it is of no consequence whether they are covered or not. If in drawing down the earth the beds have been well cut, there will be no necessity to pick away weeds or grass. Your beds ought ever to be well covered with vines. Now the work must depend upon circumstances. Your crop must be kept clean, but the earth on the beds ought not to be stirred. SOLOMON CLARK.

* Would it not be as well, Mr. Editor, whenever a quantity of land is to be expressed in a paper intended for publication, to use the term "acre" and in its constituent parts, rather than the vague and indeterminate "tasks?" The former is known and understood wherever your journal circulates—the latter is entirely local in its application, and its value varies with the locality. In the southern and south-western parts of the State, the acre is divided into four "tasks" of 105 feet square each, two of these, or half an acre, being the day's work of a full hand. In the cotton region of this section, the "task" is a portion of land 150 feet square, or as nearly as possible half an acre. Here we have the same word used to express a half acre and a quarter of an acre. How easy is it to express the intended quantity in terms which call for no explanation, and admits of no misconception.

GRAIN AND GRASS.

We extract the following from an article in the Boston Cultivator. If the assertion be true, that grass does not exhaust the soil, (and we are inclined to think there is some truth in it,) it furnishes a strong reason why ground should be kept up in tillage but barely enough to rot the turf, before it is put down in grass. There is no doubt but tough hoeing, or something else, induces many to keep up their lands too long; and thus, while they think they are recruiting them, are all the while exhausting them.—*Cheshire Farmer.*

The raising of grain requires a soil by nature rich, or made so by culture. In a populous country are created the means of enriching the soil, and these means supply the exhausted fields with the necessary pabulum, or food of future plants. This is nature's rotation, and nature's laws must be obeyed. If we will maintain our poplation on the luxury, grain, with the product of grain we must restore an exhausted soil. Grain is the great exhauster, and we could readily render our lands fertile again, if we were not obliged to crop them with grain. Grass grows spontaneously, and does not exhaust our soil. You will dispute and controvert our doctrines until you have well considered the subject, and then ninety-nine of you in a hundred will agree with us. When your lands have been mown seven years without manuring, you obtain a larger crop of corn or grain on ploughing up than if you had mown them but four. What is the reason of this? You get as large a crop because your grass is not an exhauster—you get a large crop, because in seven years the soil becomes filled with grass roots, to be decomposed as soon as you kill them with the plough. In seven years your grass land is hidebound, and choaked with abundance of roots. It will not give you half a crop of grass, but it is not because your land has been growing poorer grass; for if you plough and lay immediately to grass again, you will in most cases double your grass crops. Please to consider this doctrine well, and when you have expressed your assent, we will urge you a step farther. As it is now winter, we may as well stop, and think a little upon it till we meet again. We wish to put you in a way to double the profits of your grass lands without injuring your other crops. This is a matter we have much at heart. If you can double your quantity of hay, you can keep double your present number of cattle. We think it possible to do this without the aid of lime.

If you have as many cattle as you wish to keep, why sell off half your land, and let us double the number of farmers as well as that of stock.

[From the Zanesville Gazette.]

MR. S. HOWARD—*Sir:* Having some experience in making Thorn Fence, and being acquainted with the experience of others on the subject, I am urged to communicate what little information I have. The seed of the white thorn found on alluvial soils, seem to answer as well as the English thorn. Keep them dry and from the air (as one would potatoes) till the middle or latter end of March. About the middle of March, if the ground be in a suitable state, they may be sowed, and covered with a reasonable quantity of soil or ashes. If the ground and weather be not in a fit state, they may be mixed with compost earth and ashes, or old stable manure, and kept ready for sowing as soon as the ground becomes fit. The young plants may be set out in twelve months after. But perhaps a more eligible method would be to turn up two furrows late in the fall where the fence is intended to be, and in March following sow the thorn seed on the prepared ground where it is intended to grow. If they come up too thickly they can be easily weeded out; and they should be kept disencumbered of weeds till they become predominant.

If vacancies should occur, by accident or the death of some plants, it may be well to fill them up with Black Locusts of Privet. It is not good to plant Peach in your fence, because on the death of the Peach a vacancy will be left, and it will be difficult to fill it up by new plants, as they will remain sickly and overpowered by the surrounding encumbrance.

Black Locusts may be germinated thus: Sow the seed at the time you sow your thorn, but in a separate place. Cover them well, and make a bush-heap on them. Burn the bush-heap as soon as convenient, and the seed will vegetate. An experiment might be made thus: Mix the seed with rich moist earth, bury them in a box in a hot dunghill from the 20th of March till the 1st of April. On disenterring them sow them out.

I am yours, &c. J. H.

MR. ESPY'S THEORY ON THE PRODUCTION OF RAIN.

As many have amused themselves at the expense of this gentleman's theory, and the subject is one of interest, we give below his views on the subject, leaving the reader to judge for himself of the practicability of the plan, not affecting ourself to be able to judge of its merits. But we feel it due to Mr. Espy to state, that he possesses a very elevated character, both for moral and scientific attainments:

[From the National Gazette.]

Messrs. EDITORS: Knowing the difficulty, if not the impossibility, of making the subject intelligible in a short newspaper article, it is with reluctance that I am now induced, after much earnest solicitation from my friends, both near and remote, to give a very brief summary of the reasons and FACTS, which have led me to desire that an experiment should be made, to see whether *rain may be produced artificially in time of drought.*

The documents which I have collected on this subject, if they do not prove that the experiment will succeed, do at least prove that it ought to be tried; this I trust will most satisfactorily appear when they shall be published entire. In the meantime it has become necessary to present to the public something on the subject, lest longer silence might be construed into an abandonment of the project.

First—It is known by experiment, that if air should be expanded into double the volume by diminished pressure, it would be cooled about 90 degrees of Fahrenheit.

Second—I have shown by experiment that if air at the common dew point in summer season in time of drought, 71 degrees, should go up in a column to a height sufficient to expand it, by diminished pressure into double the volume, it would condense into water or visible cloud, by the cold of expansion, more than one-half of its vapour—a quantity sufficient to produce nearly three inches of rain.

Third—It is known by chemical principles, that the caloric of elasticity given out during the condensation of this vapour, would be equal to about 30,000 tons of anthracite coal burnt on each square mile over which the cloud extended.

Fourth—I have shown by experiment [see Saturday Courier, March 18, 1837] that this caloric of elasticity would prevent the air from cooling only about half as much as it would if it had no vapour in it, or about 45 degrees at the height

assumed, which would cause the air in the cloud to be, at that height, about 45 degrees warmer than the air on the outside of the cloud at the same height. I have shown from these principles [see Journal of the Franklin Institute for 1836] that the barometer would fall under the cloud thus formed, in favorable circumstances, a quantity as great as it is known to fall sometimes under the middle of a dense and lofty cloud, and that consequently the air would rush in on all sides towards the centre of the cloud and upwards in the middle, and thus continue the condensation of the vapour and the formation of cloud and the generation of rain. [See also Journal of the Franklin Institute, for September and October, 1838, and for January, February, and March, and subsequent, 1839.]

Fifth—I have shown also in the volumes quoted above, that the air does move inwards on all sides towards the centre of the space or region where a great rain is falling, and of course upwards after it comes in under the cloud, which is so much lighter than the surrounding air; at least, that it does so in all storms which have been investigated, which now amount to sixteen, besides several tornadoes, in all of which the trees were thrown with their tops inwards.

From the principles here established by experiment, and afterwards confirmed by observation, it follows, that if a large body of air is made to ascend in a column, a large cloud will be generated, and that the cloud will contain in itself a self-sustaining power, which may move from the place over which it was formed, and cause the air over which it passes to rise up into it, and thus form more cloud and rain, until the rain may become general: for many storms which commence in the West Indies very narrow, are known to move from the place of beginning several thousand miles, widening out and increasing in size, until they become many hundred miles wide. [See Bedfield and Read, and the Reports of Joint Committee.]

If these principles are just, it will follow, when the air is in a favorable state, that the bursting out of a volcano ought to produce rain; and such is known to be the fact, and I have abundant documents in my possession to prove it.

So, under very favorable circumstances, the bursting out of great fires ought to produce rain; and I have many facts in my possession rendering it highly probable, if not certain, that great rains have sometimes been produced by great fires.

It is a general opinion in parts of the country where great fires frequently take place, that those fires produce rain. Now this opinion could hardly have originated without some circumstances besides mere coincidence attending them, such as is related in the following account. Mr. Dobrezhoffer, a missionary to Paraguay, speaking of the tall grass and bulrushes on fire, says:—"I myself have seen clouds and lightning produced from the smoke, as it is flying off *like a whirlwind*; so that the Indians are not to blame for setting fire to the plains in order to produce rain, they having learnt that the thicker smoke turns into clouds which pours forth water."—(Account of the Abiphones, vol. 3d, page 150.)

Mr. Lapice, of Louisiana, informs Dr. S. Calhoun, of this city, "that the conflagration of the long grass in the prairies of that State, covers every thing with its cinders for miles around, and that rains follow shortly, according to immemorial observation in that country."

"Very extensive fires in Nova Scotia, in the woods, are so generally followed by heavy floods of rain, that there is some reason to believe that the enormous pillars of smoke have some share in producing them."—(Mag. Nat. Hist. for December, 1835.)

The bad philosophy of supposing that smoke was turned into cloud and produced rain, does not weaken the evidence of the main fact.

If the principle is correct, that clouds are formed by up moving columns of air, we should expect to find, in favorable states of the air, that clouds would form over large cities and manufacturing towns, where much fuel is burnt—and so we find it to be.

Extract of a letter to me, from Benj. Matthias, of Philadelphia—"In the course of last winter, while in England, I visited Manchester four or five times, and on each day it rained. Several of the inhabitants assured me that it rains in Manchester more or less every day in the year."

Extract from Edward Mammatt's Collection of Facts concerning Ashby Coal Field—4to, London, 1836:

"When the air is apparently stagnant in the valley of the Thames and surrounding country, a strong current is found to set in on every side of London, along the streets leading from the country, in the morning. This current is no doubt occasioned by the rarefaction in the high chimneys over so many thousand fires just kindled, and must be the cause of the introduction of fresh air to an immense extent, which would not otherwise flow. This rarefaction produces other phenomena, among which, when the atmosphere is in a light state, and clouds are passing at a height which does not allow them to condense and fall in rain, these accumulate in passing over London, and either remain as a dense fog, or drop in small rain all day long, scarcely clearing once; the country at a little distance having very little rain."

The bad philosophy of supposing the air so light on these occasions as to let the clouds on passing sink down in it over London, does not invalidate the evidence of the principal fact.

From these remarkable facts alone, I think it will be acknowledged, that there is some connection between great fires and rains other than mere coincidence, even if that connection remained a mystery. Humboldt acknowledged this in the case of volcanoes, when he speaks of the *mysterious* connection between volcanoes aud rain, and says that when a volcano bursts out in South America in a dry season, it sometimes changes into a rainy one. But now, when it is demonstrated by the most decisive evidence, the evidence of experiment, that air in ascending into the atmosphere in a column, as it must do over a great fire, will cool by diminished pressure so much that it will begin to condense its vapour into cloud as soon as it shall rise about as many hundred yards as the temperature of the air is above the dewpoint in degrees of Fahrenheit, it amounts to a very *high* probability that great fires have *sometimes* produced rain. That great fires, and even volcanoes, should not *always* produce rain, is manifest from the circumstance that as they break out accidentally, they may sometimes occur when the state of the atmosphere is unfavorable, and even adverse to rain. First, if they should break out when there is a current of air either near the surface of the earth, or at a considerable distance above, of some strength, the up-moving column would be swept by it out of the perpendicular, before a cloud of great density could be formed, and thus rain would be prevented.

Second, they might break out when the dew-point was too low to produce rain at all; and, third, there may sometimes be an upper stratum of air, containing so much caloric, that its specific levity would prevent the up-moving column from rising into it far enough to cause rain.

These three things I conceive are the only circumstances which prevent great fires from producing rain at all times when they occur. The first two can be ascertained without much difficulty, by means of small balloons and the dew-point; the last, in the present state of science, cannot always be known, and a failure on that account must be risked by the experimenter. This risk I am willing to run, if Congress or the State Legislature will promise a sufficient reward *in case of success.*

It has been objected to my project that I propose too much, and that it is utterly absurd to expect to make rain in time of drought, when there is such a scarcity of vapour in the air.

Now this objection is founded on an entire ignorance of the fact, arising from a want of due consideration. For there is *generally* more vapour in the time of summer drought than at any other time, as I know by experiments constantly made almost every day for the last ten years; and this is reasonable in itself, for the vapour is rising into the air and increasing every day of dry weather, preparing for another rain. A quiet state of the atmosphere is also more likely to occur, to great heights, in time of droughts than at any other time, for immediately after rains there are sure to be cross currents of air, produced by the inward motion of the air at the lower part of the cloud and an outward motion in the upper part, which require some time after the rain to come to rest.

If I have succeeded in showing that there is any, the least ground to hope that an attempt to produce rain, might sometimes succeed under favorable circumstances, and that those favorable circumstances are more likely to occur in time of drought than at any other time, then it follows that the experiment is a highly interesting one, and ought to be immediately tried. If it should be successful, who can tell the mighty results which may follow in its train.

I have many reasons and facts which induce me to believe that if a very large cloud is once generated, the rain will become general, or at least spread over a wide extent of territory; and who can tell, *a priori*, that this will not be the case, when it is now known that an immense steam power is let loose in the formation of such a cloud—a power which can be calculated with as much accuracy as that of the steam engine itself, and in part on the same principles.

Gentlemen have made their puns on this project, and had their laugh; and I am sorry to see by letters which I have received, that my friends and relations at a distance are much troubled at

the innocent laughs; but let them be consoled, I have laughed too, well knowing that those who laughed the most heartily would be the most willing to encourage the experiment, as soon as they discovered they had nothing to laugh at. As a proof that I was right in this anticipation, I may be permitted to say, that I have lately received a letter from a highly esteemed member of the American Legislature, who laughed as heartily as *any* one when my petition was presented there, containing many kind expressions, and promising me by way of amends for his levity, "to avail himself of the earliest opportunity of being better informed on the subject of my new philosophy." Such conduct as this is all I want; I fear not the strictest scrutiny.

If I should be encouraged to go on with the experiment, I mean to have a large mass of combustibles prepared ready for use, and when I have found all the circumstances mentioned before, favorable in a time of drought, I would set fire to the circumference in several places at once. Soon after the fire commences I will expect to see clouds begin to form, about as many hundred yards high as the temperature of the air is above the dew-point in degrees of Fahrenheit. I will expect to see this cloud rapidly increase in size, if its top is not swept off by a current of air at a considerable distance above the earth, until it becomes so lofty as to rain. I shall expect the cloud to move eastwardly, increasing in width as it advances, and the next day I shall expect the region to the south of where the rain fell, to be visited by rain, for a reason explained in my writings.

But it is in vain to anticipate all the results which will follow, for nothing but the experiment itself can demonstrate them. If the experiments when repeatedly tried should fail, it would be in vain for me to say I would not be mortified—but I will not incur any disgrace, unless it is disgraceful to desire to see a great experiment made, which all the knowledge we have on the subject, in the present state of science, leads us to hope will be crowned with success.

I have made this very brief, though necessarily imperfect statement of my reasons, for wishing to see the experiment tried, which can alone decide the question, to comply with earnest and repeated solicitations of my friends. I will now, in conclusion, say something for myself.

The present state of the science of Meteorology renders it highly important to know in what direction and with what velocity summer rains travel over the surface of the earth. What is their shape, round or oblong; and if oblong, in what direction their transverse diameter lies, and whether they move side foremost, or end foremost, or obliquely. Now I request gentlemen throughout the United States who feel interested in this subject, to keep a journal of all rains, from the beginning of June till the end of September; noting their beginnings and endings, the force and direction of the wind, and also of the clouds, and send the accounts (published in some paper) as early in October as convenient, to William Hamilton, Esq. Actuary of the Franklin Institute, Philadelphia.

Finally, if any gentleman intends to clear from twenty to fifty acres of woodland this spring, or early in the summer, in the western or northwestern parts of Pennsylvania, will he please to inform me of the fact as soon as convenient.

Journals of the weather also for the 16th, 17th, and 18th of March, 1838, kept in various parts of Virginia and North Carolina, are much desired; and if gentlemen can even tell me how the trees are thrown down, indicating the direction of the wind, the information will be highly valuable, and should not be withheld if nothing is known or recollected.

I am, gentlemen, yours respectfully,
JAMES P. ESPY.

Philadelphia, April 2, 1839.

MULBERRY TREES, &c.

WM. PRINCE & SON still have the following Trees for sale:

35,000 genuine Morus Multicaulis Trees, from 1 to 6 feet high, which will be sold either trimmed or untrimmed, or in battings; the wood of these trees is perfectly mature, and they have been well preserved from all injury.

42,000 genuine ALPINE TREES, of a very superior character, at least equal to any in the Union.

10,000 of the splendid MORUS EXPANSA, 5 to 9 feet high, and much branched, remarkable for its great excellence in every respect. This is the only large parcel of this tree existing in this country.

75,000 Canton, Brussa, Morus Elata, Rose of Lombardy, Roman, Pyramidalis, Oriental, white Italian and other kinds, all of which will be sold at prices deemed moderate. Also a large assortment of the silk worms Eggs of the most choice and valuable kinds

Ample directions for the culture and successful propagation of all kinds of Mulberry Trees will be given to every purchaser.

Flushing, near New York, April 17, 1839.
ap 23 8t*$3

TWO DURHAM BULLS.

For sale, an IMPORTED short-horn Durham bull, rising 2 years old, of fine size and form, a strawberry roan—price $500.

ALSO—another bull of the same breed called RODERICK; he is 2 years old, is out of White Rose; she by the imported short-horn (improved) Durham bull Gloucester. For Gloucester's pedigree see British herd-book. Roderick is a pure white, out of Virginia, an imported cow, raised by Mr. Curwen of England. Price $300.

The pedigrees are both unexceptionable.
ap 23 3t E. P. ROBERTS.

CHINESE MULBERRY TREES.

American Silk Agency, No. 95, Walnut st. Philadelphia

The subscriber having opened a permanent Agency for the purchase and sale of all articles connected with the culture and manufacture of Silk in the United States, offers for sale all the different varieties of MULBERRY TREES, suitable for raising the SILK WORM; viz: Morus Multicaulis Alpinese, Brussa Multicaulis Seedlings. Morus Expansa, Multicaulis Cuttings, Improved Italian Trees, &c. Also, Cuttings from *Norton's Virginia Seedlings*, and Cunningham's Prince Edward GRAPE VINES. These vines produce an abundant crop of fruit, warranted not to rot or mildew and are fine for the table, and capable of yielding the finest wines.

S. C. CLEVELAND, Agent.

SILK AGENCY,

Corner of E. and 7th streets, Washington City, D. C.

The subscriber having commenced an Agency for the purchase and sale of SILK MULBERRY TREES, and all articles connected with the growing of Silk, offers for sale the following varieties of Mulberry Trees at Baltimore prices, viz. Multicaulis, Alpine, Broussa, White Italian and Canton; also Mammoth White Silk Worm's Eggs, warranted to be of superior quality. All the recent publications on silk growing for sale, and subscriptions received for the various periodicals edvoted to that subject. no 20 J. F. CALLAN

☞ *Printing, executed at the Farmer & Gardener office, at short notice.*

AGRICULTURAL IMPLEMENTS.

THE Subscriber acknowledges with gratitude the liberal patronage he has received from the public since the establishment of his Repository in 1825.—During this long period he has studied successfully his own interest by identifying them with the interest of his customers in being prompt and faithful in the execution of their orders.

His present facilities of manufacturing agricultural implements, are not surpassed by any other establishment in this country, he can therefore afford them on as reasonable terms as any other person for the same quality of work. His present stock of implements are extensive both in quality and variety, to which he would invite the attention of those who wish to purchase.

A liberal discount will be made to all cash purchasers, and to those who purchase to sell again.

The following names are some of his leading articles viz His *PATENT CYLINDRICAL STRAW CUTTERS*, wood and iron frames, but all with his patent double eccentric feeders, with or without extra Knives, prices varying from $33 to $110, subject to cash discount, he challenges the world to produce a better machine for cutting long forage, Myer's *WHEAT FAN* and *ELLIOTT'S PATENT HORIZONTAL WHEAT FANS*, both a very superior article. Fox & Borland's *PATENT THRESHING MACHINES* and Martineauls *PATENT HORSE POWERS*, also superior articles — A great variety of *PLOUGHS*, wrought and cast Shares, of all sizes and prices; Gideon Davis's improved *PLOUGHS*, of Davis,s own make of Patterns, which are sufficiently known to the public not to require commendation; 100 *CORN CULTIVATORS*, also expanding *CULTIVATORS*, both iron and wood frames, and new plan; *TOBACCO CULTIVATORS*.

F. H. Smith's *PATENT LIME SPREADERS*, the utility of which has been made known to the public; together with a general assortment of *FARMING IMPLEMENTS*; *PLOUGH CASTINGS* of every description and superior quality kept constantly on hand at retail or by the ton; also, *MACHINE* and other *CASTINGS* furnished at short notice and on reasonable terms, his iron Foundry being furnished with the best materials and experienced workmen with ample machinery running by steam power for turning and fitting up machinery.

ALSO—Constantly on hand D. Landreth's superior *GARDEN SEEDS*;—In store *POTATOES* and common *SEED OATS*, *TIMOTHY* and *HERDS SEEDS* all of superior quality.—All orders will be promptly attended to. JONATHAN S. EASTMAN,

Farmers' Repository, Pratt street,
Near the Baltimore & Ohio Rail Road Depot.

AGRICULTURAL IMPLEMENTS.

John T. Durding & Co. encouraged by the favors shown them in the past year, are determined to offer no article to their friends but such as they can warrant, made of the very best materials, finished in a superior manner, of the newest patterns, and at liberal prices.

From John T. D.'s long experience in the manufacture of these articles he flatter himself that he can give entire satisfaction to those farmers, Commission Merchants, Captains and others who may favor him with their orders.

J. T. D. & Co. wish especially to recommend a lately improved and superior "Wheat Fan" as being admirably adapted to clean effectually and fast—price $25 They invite the attention of the public to their stock of Castings for ploughs or machinery, by the lb. or ton at the lowest prices Also on sale, New York ploughs, No. 10 1-4 at $3, No. 11 1-4 at 3 25, No. 12 1-4 at $3 75. Repairs in general done with neatness and despatch——any new machine coming into market may be obtained to order.

All orders for field and garden seeds, of the best kinds and fresh, will also be fuanished at our Agricultural Establishmedt, upon the usual terms, by Thomas Denny, seedsman, Grant St. Baltimore, rear of Messrs. Dinsmore & Kyle. fe 26

A HERDSMAN WANTED.

An experienced herdsman who knows his business thoroughly, who is acquainted with the diseases and management of cattle, and who is sober and industrious, will obtain a good place and wages by applying to Geo. Beltz. hoover, Fountain Inn, Baltimore, or to WM. GOLL,

Near the first gate on the Frederick turnpike road.
april 9 3t

BALTIMORE PRODUCE MARKET.

☞ *These Prices are carefully corrected every Mon*

	PER	FROM	TO
Beans, white field,	bushel.	1 75	—
Cattle, on the hoof,	100lbs	12 00	12 50
Corn, yellow	bushel	86	87
White	"	85	86
Cotton, Virginia,	pound	14	15¼
North Carolina,	"	13½	15
Upland,	"	14½	15
Louisiana —— Alabama	"	15	16¼
Feathers,	pound.	53	55
Flaxseed,	bushel.	1 60	1 65
Flour & Meal—Best wh. wh't fam.	barrel.	—	—
Do. do. baker's	"	—	—
Super How. st. from stores	"	7 25	—
" " wagon price,	"	7 00	—
City Mills, super	"	7 50	—
" extra	"	—	—
Susquehanna,	"	7 37	—
Rye,	"	5 50	—
Kiln-dried Meal, in hhds.	hhd.	18 50	—
do. in bbls.	bbl.	4 37	—
Grass Seeds, wholes. red Clover,	bushel.	12 50	13 00
Kentucky blue	"	—	—
Timothy (herds of the north)	"	2 75	3 00
Orchard,	"	2 00	2 50
Tall meadow Oat,	"	—	3 00
Herds, or red top,	"	—	1 00
Hay, in bulk,	ton.	17 00	19 00
Hemp, country, dew rotted,	pound.	6	7
" water rotted,	"	7	—
Hogs, on the hoof,	100lb.	—	9 50
Slaughtered,		—	—
Hops—first sort,	pound.	20	—
second,	"	18	—
refuse,	"	—	—
Lime,	bushel.	32	33
Mustard Seed, Domestic, —; blk.	"	3 50	4 00
Oats,	"	48	50
Peas, red eye,	bushel.	1 40	—
Black eye,	"	1 40	—
Lady,	"	1 40	—
Plaster Paris, in the stone, cargo,	ton.	3 25	3 50
Ground,	barrel.	1 37	1 50
Palma Christa Bean,	bushel.	—	—
Rags,	pound.	3	4
Rye,	bushel.	90	1 00
Susquehannah,	"	—	none
Tobacco, crop, common,	100lbs	5 00	5 50
" brown and red,	"	6 00	6 50
" fine red,	"	9 00	12 00
" wrappery, suitable for segars,	"	10 00	20 00
" yellow and red,	"	10 00	14 00
" good yellow,	"	10 00	15 00
" fine yellow,	"	12 00	15 00
Seconds, as in quality,	"	6 00	10 00
" ground leaf,	"	7 00	13 00
Virginia,	"	6 00	10 00
Rappahannock,	"	—	—
Kentucky,	"	6 00	8 00
Wheat, white,	bushel.	—	—
Red, best	"	1 60	1 63
Maryland	"	—	—
Whiskey, 1st pf. in bbls. (sworn)	gallon.	—	39½
" in hhds. (sworn)	"	38½	—
" wagon price, (sworn)	"	bbls	—
Wagon Freights, to Pittsburgh,	100lbs	2 25	2 50
To Wheeling,	"	2 75	—
		washed.	unwash
Wool, Prime & Saxon Fleeces,	pound.	50 to 55	
Full Merino,	"	45 50	
Three fourths Merino,	"	40 45	
One half do.	"	35 40	
Common & one fourth Meri.	"	35 40	
Pulled,	"	30 33	

Potatoes, 60 to 85 cts. a bushel.

THE AMERICAN FARMER.

The proprietors of this paper have a few complete sets of this work on hand, which they will dispose of at the reduced price of $50 a set.

oct 16 3

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
Apples,	barrel.	—	—
Bacon, ham new, Balt. cured	pound.	13½	14
Sa ulders, do	"	11	12
Middlings, do	"	12	—
Assorted, country,	"	10	11
Butter, printed, in lbs. & half lbs.	"	31	50
Roll,	"	25	31½
Cider,	barrel.	1 75	2 00
Calves, three to six weeks old	each.	5 00	6 00
Cows, new milch,	"	30 00	40 00
Dry,	"	—	—
Corn Meal, for family use,	100lbs.	2 00	2 12½
Chop Rye,	"	—	1 60
Eggs,	dozen.	25	—
Fish, Shad, No. 1, Susquehanna,	barrel.	—	—
No. 2,	"	—	—
Herrings, salted, No. 1,	"	6 00	6 25
Mackerel, No. 1, —— No. 2	"	12 00	15 00
No. 3,	"	7 75	—
Cod, salted,	cwt.	3 25	3 37
Lard,	pound.	12	13

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,	par	VIRGINIA.	
Branch at Baltimore,	do	Farmers Bank of Virgi.	1
Other Branches,	do	Bank of Virginia,	do
MARYLAND.		Branch at Fredericksburg	¼a½
Banks in Baltimore,	par	Petersburg,	½
Hagerstown,	o	Norfolk,	do
Frederick,	do	Winchester,	½
Westminster,	do	Lynchburg,	1
Farmers' Bank of Mary'd,	do	Danville,	1
Do. payable at Easton,	do	Bank of Valley, Winch.	1-2
Salisbury, 1 per ct. dis.		Branch at Romney,	1-2
Cumberland,	par	Do. Charlestown,	1-2
Millington,	do	Do. Leesburg,	1-2
DISTRICT.		Wheeling Banks,	2
Washington, Georgetown, Alexandria, Banks, ½ p.c.		Ohio Banks, generally	5
PENNSYLVANIA.		New Jersey Banks gen.	3
Philadelphia,	par	New York City,	par
Chambersburg,	½	New York State,	½a 1
Gettysburg	do	Massachusetts,	2a2½
Pittsburg,	2	Connecticut,	do
York,	½	New Hampshire,	do
Other Pennsylvania Bks.	1	Maine,	do
Delaware [under $5]	4	Rhode Island,	do
Do. [over 5]	1½	North Carolina,	2½a3
Michigan Banks,	6	South Carolina,	4a5
Canadian do.	10	Georgia,	5a5½
		New Orleans.	7a8

SEEDS, PLANTS, FLOWERS.

The subscriber offers for sale at his establishment a fresh supply of GARDEN SEEDS of the very best quality; those that cannot be grown in this countsy he imports direct from Europe from a source that can be relied on.

Besides a large collection of GREENHOUSE, hardy ORNAMENTAL TREES and Shrubs, Herbaceous Plants, and Bulbous Roots, and a choice collection of the very finest double Dahlias offered for sale, all on reasonable terms, wholesale or retail.

Also on hand a few bushels of ITALIAN RYE GRASS, with 100 bush. ITALIAN SPRING WHEAT, of the true kind. All orders for Fruit and Ornamental Trees, or any thing appertaining to his establishment will be strictly attended to, by JOHN FEAST,

Florist & Seedsman, cor. of Lexington and Pine sts.

ja 22 tf Baltimore.

A YOUNG BULL.

For sale a fine young Bull of the Devon and Teeswater breed. He is rising twelve months old, well grown and handsomely marked with red and white. His dam is teeswater and a deep milker.

EDWARD P. ROBERTS.

april 2

ROBERTS' SILK MANUAL.

The Fourth edition of this popular work is now in a course of publication by the subscribers, and will be issued from the press about the 1st May, printed with new type on a good paper. It contains upwards of 100 large octavo pages, and embraces every information needed by the silk culturist from the planting and rearing of the mulberry to the making and dyeing of Sewings & Twists; the plan of constructing cocooneries, feeding shelves, the process of feeding the worms, ventilation of their apartments, apportionment of food, and in fine, every thing necessary to the acquisition of a silk culturist is lucidly treated. A large edition has been nearly disposed of since about the 1st January, and the present edition has been put to press to supply a large order (1500 copies) from the legislature of Pennsylvania for gratuitous distribution in that commonwealth, by the recommendation of the committee on agriculture, who gave it their decided approbation and recommendation over every other work published on the subject. The late Governor of Maryland also recommended it in a special message to the legislature, for distribution among the people, and it has received the commendations of the committee on Agriculture of the House of Rep. of the Congress of the U. S.— A large edition is now publishing, and all orders from a distance can be promptly filled. A large discount will be made to the trade. Price 37 1-2 cts. per single copy. Address E. P ROBERTS & S. SANDS, Balti. Md.

☞ Who are also publishers of the "Farmer & Gardener," a weekly journal devoted to Agriculture, &c. &c. the 6th vol. of which commences in May — $2.50 per ann.

Baltimore, Md. April 23, 1839.

☞ The following named papers will please publish the above to the amount of $2: Maine Farmer, Boston Atlas, New Hampshire Patriot, Connecticut Courant, Albany Cultivator, N. Y. Courier & Enquirer, New Brunswick Times, Phil. American Sentinel, U. S. Gazette, and Saturday Courier, Wilmington, Del. State Journal, Centreville Times, Fredericktown Herald, National Intelligencer, Richmond Enquirer, Raleigh Register, Charleston Mercury, Savannah Georgian, Natchez Courier, N. Orleans Bee, Mobile Mercantile Advertiser, Cincinnati Gazette, Louisville Journal, Nashville Banner, Detroit Journal, Indianopolis Farmer, and St. Clair (Ill.) Gazette.

FOR SALE,

A valuable FARM of prime soil, on the Western Run in Baltimore county, about two miles north west of the 14th mile stone of the Baltimore and York turnpike road, and at the same distance from the depot of the Baltimore and Susquehanna rail road, at Cockey's tavern, in a rich, highly cultivated and healthy tract of country.

This farm contains from 260 to 270 acres, having a full proportion in wood, much of which is building timber, peculiarly valuable in that neighborhood; is in the best state of cultivation; a considerable part in productive timothy meadow, and the residue of the arable land, not in grain, is well set in clover, the whole under good fencing, laid off into convenient fields, each of which is well watered. The farm has a large quarry of excellent building stone. There are on the premises an apple orchard of select fruit trees, which seldom fail to bear abundantly; a valuable mill seat on the Western Run, with a race already dug. There is no location in the country more favorable for a grist mill, having the advantage of a rich and thickly settled neighborhood, and a good public road leading thence to the turnpike road. Buildings substantial and convenient, being a STONE DWELLING, and kitchen of two stories; a large stone Switzer barn, with cedar roof and extensive stabling below; large hay house and stable for cattle; stone milk house near the dwelling, with a spring of fine never failing water, with other out-houses. On the country road near the mill-seat a good house and shop for a mechanic, under rent to a good tenant. It is well known the lands on the Western Run are in every respect equal, if not superior to any in the county. Adjoining or near are the lands of Col N. Bosley, Daniel Bosley, Thos. Matthews and others. The water power, with about 20 acres of land, is so situated that they may be detached and sold separately, without injury to the rest of the farm for agricultural purposes. Terms of sale will be liberal. Apply to

NATHANIEL CHILDS,
on the premises, or to
WILLIAM J. WARD,